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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,840	02/26/2002	Gerhard Wischermann	DE010058	6180

24737 7590 09/07/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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BRIARCLIFF MANOR, NY 10510

EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,840

Applicant(s)

WISCHERMANN, GERHARD

Examiner

BRIAN P. YENKE

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on PreAmendment (26 Feb 02).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 26 Feb 02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Kim, US

6,633,342.

In considering claim 1,

Kim discloses (Fig 6) a noise reduction system which splits the lower frequency content in one path (via LPF 602) and the non-filtered path (which includes the local higher frequency content) via first delay 601. The higher frequency component is passed thru a noise eliminating unit 604, which is then added with the delayed (via 602) lower frequency component signal via adder 606.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3a. Claims 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, US 6,633,342 in view of Applicant's Admitted Prior Art (AAPA).

In considering claim 2,

Kim does not explicitly recite a recursive filter, where the feedback factor can be controlled by a movement detector 8 to which the high frequency spectral content can be fed.

Kim discloses the use of a noise eliminating circuit 604 (Fig 6), where circuit 604 may be various noise elimination methods (col 5, line 1-6).

The use of a recursive filter as claimed is conventional in the art, as disclosed by applicant's own specification where Prior Art includes a time filter/noise reducer (Fig 2) as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kim which discloses performing noise reduction on the high frequency components of a signal, with AAPA by utilizing a recursive/motion responsive conventional time filter/noise reducer, in order to provide a noise-free signal which filters the signal using an adaptive/motion responsively detection in accurately removing the noise.

In considering claim 5,

Please see rejection for claim 2.

In considering claims 6-7 (with respect to claims 2 or 5),

Kim does not explicitly recite the reducing the output of the time filter based upon movement, where large movement would reduce the signal to a minimal value.

However, the use of analyzing a signal based upon motion of the signal is conventional in the art, since motion within an image is used to determine the presence of a noise within the image.

AAPA also discloses that motion within a image indicates the presence or not of noise.

Thus, the examiner takes "OFFICIAL NOTICE" regarding the use of such a motion detection/amplitude controlled system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kim and AAPA which discloses the noise removal of a high frequency components within a received signal, by also accounting for any motion within the noise removed signal, since movement within an image typically indicates the possibility of noise, thereby providing an ideally noise-free signal.

3b. Claims 3-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, US 6,633,342.

In considering claim 3,

Kim discloses delaying the high frequency component (via first delay 601) where the delayed high frequency signal is subtracted (via subtractor 603) from the low frequency component signal.

However, Kim does not explicitly disclose the size of the LPF (i.e. 5x5 to 11x11 pixels being provided).

The size of the filter being approximately between the sizes claimed is not a patentable distinct feature, since filters may vary in sizes based upon the system/data and processing being carried. Also, the claim reciting the size of the filter derives no unexpected results, since the size of the filter will produce the number of pixels based upon the size, thus the size of the filter as recited in the claim bares no inventiveness/novelty with respect to patentability.

In considering claim 4,

Kim does not disclose obtaining the medium spectral contents subsequent processing (which was previously performed with the high frequency signal).

The obtaining of the medium spectral content is conventional in the art, since a signal based upon it's characteristics can have low, medium and high frequency spectral components which can be obtained by filters with various cutoff frequencies.

Therefore, the examiner takes "OFFICIAL NOTICE" regarding the obtaining of the medium spectral content of a signal.

Therefore, in the event additional splicing is performed on a signal to obtain it's signal characteristics, it would have been obvious to one of ordinary skill in the art at the time of the invention to obtain all the necessary spectral components and subtract/add these components in the noise removal system as done previously in order to acquire a clean signal.

In considering claims 6-7 (with respect to claims 1 and 3-4),

Kim does not explicitly recite the reducing the output of the time filter based upon movement, where large movement would reduce the signal to a minimal value.

However, the use of analyzing a signal based upon motion of the signal is conventional in the art, since motion within an image is used to determine the presence of a noise within the image.

Thus, the examiner takes "OFFICIAL NOTICE" regarding the use of such a motion detection/amplitude controlled system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kim which discloses the noise removal of a high

frequency components within a received signal, by also accounting for any motion within the noise removed signal, since movement within an image typically indicates the possibility of noise, thereby providing an ideally noise-free signal.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (703)305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

(703)305-HELP.

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800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

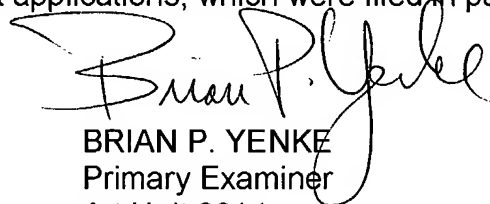
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BRIAN P. YENKE
Primary Examiner
Art Unit 2614



B.P.V.

03 September 2004